

DRILL HOLES

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BY: Aaron Hottenstein Division: P068 Highway TrafficGMA Emp

BORDER REV: DATE: J060127200807

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES MODIFYING THE EXISTING EXCLUSIVE/PERMISSIVE LEFT-TURN PHASE FOR NORTHBOUND US 1 TO PERMIT LEFT TURNS ON A FLASHING RED ARROW. US 1 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION IS TO OPERATE IN A NEMA SIX-PHASE, FULLY ACTUATED MODE WITH EXCLUSIVE LEFT-TURN PHASING FOR NORTHBOUND AND SOUTHBOUND TRAFFIC DURING PEAK PERIODS. AN OVERLAP FOR EASTBOUND RIGHT-TURNING TRAFFIC, AND SIDE STREET SPLIT PHASING. DURING PEAK PERIODS, A NORTHBOUND QUEUE DETECTOR WILL IMPLEMENT A LEAD-LAG LEFT-TURN PHASE. THE NORTHBOUND AND SOUTHBOUND US 1 LEFT-TURN WILL FLASH "RED ARROW" UNTIL VEHICLES ACTUATE THE LEFT-TURN SIGNALS DURING THE OFF-PEAK PERIOD.

I. SPECIAL NOTES

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOW:

DISTRICT

MS. ANDREA ABEND  
UTILITY ENGINEER  
301-624-8115/8116

MR. JOHN CONCANNON  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
301-624-8140/8141

MR. JOHN HUCHROWSKI  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
301-624-8200/8201

MS. SUE PALMER  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
301-624-8105/8106

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
TEAM LEADER SIGNAL OPERATIONS  
410-787-7670

MR. MIKE STOCKER  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.03-09, 104.03-11, 104.03-13.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO./ CAT CODE	QUANTITY	DESCRIPTION
9571	111.8 SF	SHEET ALUMINUM SIGNS CONSISTING OF:
4	EACH	R10-12(2), 48"x36", MAST ARM MOUNT
1	EACH	R1-2, 36"x36", WOOD POLE MOUNT
2	EACH	M3-3, 24"x12", WOOD POLE MOUNT
2	EACH	M1-4, 24"x24", WOOD POLE MOUNT
2	EACH	M6-1, 21"x15", WOOD POLE MOUNT
1	EACH	ASSOCIATED SHIELD ASSEMBLY, 24"x48", POLE MOUNT
1	EACH	ASSOCIATED SHIELD ASSEMBLY, 48"x72", POLE MOUNT
1	EACH	R5-1, 30"x30", WOOD POLE MOUNT

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO./ CAT CODE	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5002	560 LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PAVEMENT MARKINGS
5005	40 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
8001	12 EA	12 INCH LED SIGNAL HEAD SECTION
8023	1 EA	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8039	36 LF	WOOD SIGN SUPPORT UP TO 4 INCH X 6 INCH
8040	112 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8055	30 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8056	130 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
**KCI**  
TECHNOLOGIES  
936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818

PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
←R- ←Y- ←G-	R Y G	R Y G	←R- ←Y- ←G-	Y Y	Y Y	←R- ←Y- ←G-	R Y G	R Y G	←R- ←Y- ←G-	R Y G	←R- ←Y- ←G-	R Y G	R Y G	R Y G

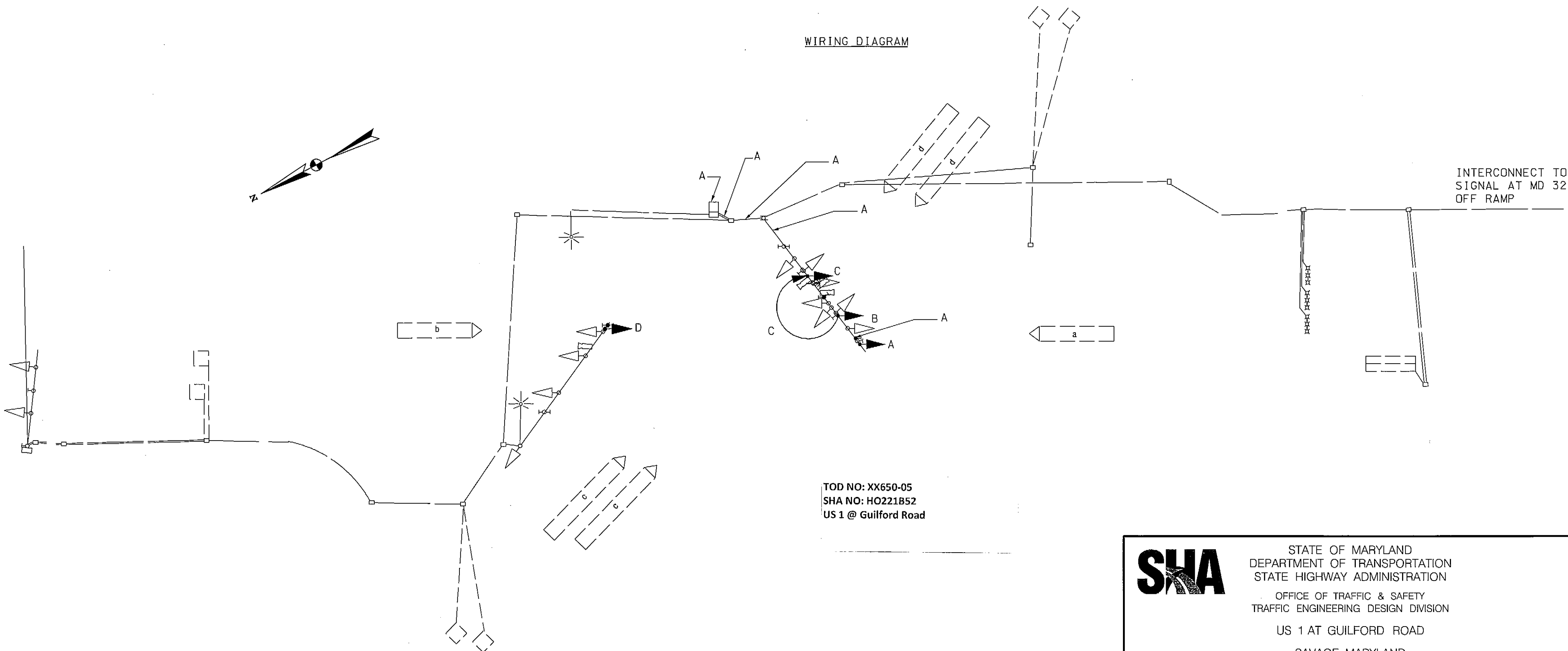
PHASE 1 AND 5	←G-	R	R	←G-	FLY	FLY	←G-	R	R	←G-	R/R	R/R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6														
PHASE 1 AND 6	←R-	R	R	←R-	DARK	DARK	←G-	G	G	←G-	R	R	R	R
1 AND 6 CHANGE	←R-	R	R	←R-	DARK	DARK	←Y-	Y	Y	←Y-	R	R	R	R
PHASE 2 AND 5	←G-	G	G	←G-	FLY	FLY	←R-	R	R	←R-	R	R/R	R	R
2 AND 5 CHANGE	←Y-	Y	Y	←Y-	FLY	FLY	←R-	R	R	←R-	R	R/Y	R	R
PHASE 2 AND 6	FL/R	G	G	FL/R	DARK	DARK	FL/R	G	G	FL/R	R	R	R	R
2 AND 6 CHANGE	←R-	Y	Y	←R-	DARK	DARK	←R-	Y	Y	←R-	R	R	R	R
PHASE 3	←R-	R	R	←R-	FLY	FLY	←R-	R	R	←R-	R	R	G/G	G
PHASE 3 CHANGE	←R-	R	R	←R-	FLY	FLY	←R-	R	R	←R-	R	R	Y	Y
PHASE 4	←R-	R	R	←R-	FLY	FLY	←R-	R	R	←R-	G/G	G/G	G	R
PHASE 4 CHANGE	←R-	R	R	←R-	FLY	FLY	←R-	R	R	←R-	Y	Y	Y	R
FLASHING OPERATION	FL/R	FLY	FLY	FL/R	DARK	DARK	FL/R	FLY	FLY	FL/R	FL/R	FL/R	FL/R	FL/R

\* SIGNALS 5 AND 6 FLASH WHEN ACTIVATED.

PRE-EMPTION

PRE-EMPTION PHASE 2 AND 5	←G-	G	G	←G-	FLY	FLY	←R-	R	R	←R-	R	R	R/G	R	R
PRE-EMPTION PHASE 2 AND 5 CLEARANCE	←Y-	Y	Y	←Y-	FLY	FLY	←R-	R	R	←R-	R	R	R/Y	R	R

WIRING DIAGRAM



TOD NO: XX650-05  
SHA NO: HO221852  
US 1 @ Guilford Road



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
US 1 AT GUILFORD ROAD  
SAVAGE, MARYLAND

REVISIONS

GENERAL INFORMATION SHEET

SCALE 1" = 20' ADVERTISED DATE 7/2011 CONTRACT NO. XX650E185

DESIGNED BY AFAMH COUNTY HOWARD  
DRAWN BY RLB LOGMILE 13000103.26  
CHECKED BY JFL TIMS NO. K917  
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 270M DRAWING SG-2 OF 2 SHEET NO. 2 OF 2

PLOTTED: 08:12 AM on Friday, July 29, 2011  
FILE: M:\2009\01060619.32\drawings\K917GISheet.dgn